Health and Nutritional Security: Efficacy and Perspectives of Tribal Women in Odisha

Dr. Sucheta Priyabadini
Director, Students Services, KIIT University
Mr. Santosh Kumar Pradhan
Research Associate, KIIT University
Mrs. Shradha Padhi
Associate Professor, KIIT School Of Management (KSOM), KIIT University

ABSTRACT

The purpose of this article is to develop a platform for establishing linkage between nutritional security and livelihood security for tribal women community. The objective is to explore availability and accessibility of health and nutritional security among tribal women and children. In addition to this, exploring community participation model on nutrition and livelihood security. Vulnerability and adoption profiling of the major vulnerable tribal women’s health, livelihood and nutritional aspects was explored through observational and consultation approach. Cluster sampling had chosen taking into account the indigenous practice of tribal nutrition model. The study calculated, there would be 8 enumeration areas in tribal locations for a total of 300 households sample size. For qualitative analysis and inference the author used various tools and techniques of sociological methods for primary and secondary data collection, these are like; Key Informant Interview, In-depth Case Study, Focus Group Discussion and community session. In addition, the study also includes field observation and consultations with experts were used.

The study was analysed by using correlation statistical methods in quantitative aspects where as critical investigations were focused in qualitative point of view. The exploratory study found that livelihood vs nutritional insecurity occurs due to joblessness, landlessness and several features of household structure. In nutritional security, poor environmental hygiene, inaccessibility of basic health care services and infrequent breast feeding practice causing nutrition deficiency of child. The research study was purely based on exploratory methods covering only 300 households from the whole tribal locations.

---

1 The author has completed PhD and D Liit from Utkal University. She has completed her post-Doctoral research at Monash University, Australia under the Goverment of Australia Fellowship (Endeavour). She has published article in national and international journals. Her book on “Journey through the Gender Prejudices-Women in Engineering’ by Lambart publisher, Germany is appreciated by many. She has been working in academics for last 26 years. She has been exposed to international fields on policy and governance issues. Presently she is associated with KIIT University as Director– Student Services.

2 The author is a PhD Scholar in Social Work subject. He has worked with many development institution and commissioners of Supreme Court of India on food security. He is associated both in academics and social research fields. He has been engaged for last 10 years in tribal livelihoods, nutrition, food security and declining child sex ratio fields. Development perspective policy analysis is one of his major interest areas. Presently he is working as Associate Researcher at KIIT University and most of the articles have been published at the national and international repute journals.

3 The author has completed PhD from KIIT university. She has over 20 years of professional experience which includes over 17+ years in the field of Learning and Development. Her areas of expertise include Leadership Development, Customer Relations, Diversity Management, Team Building, Instructional Design, mentoring and coaching. Shradha had facilitated programs on varied topics, both in India and abroad, which includes Leadership, High Performance Team, Culture and Gender Diversity, Customer Relation, Creative Thinking, Personal Effectiveness, etc in different sectors like IT, Manufacturing, BPO, NGOs etc. She is also a life coach.
tribal population of the district and it is not an adequate sample size considering the whole population of the concern district. Due to inaccessible geographical location and poor health care facilities and low level of education among tribal women, the researcher could not get enough sample size within limited financial resources. Practically, this research method can be replicated in other similar areas to address the root cause of nutrition deficiency and livelihoods supports mechanisms.

This small piece of research work is purely original which was conducted by three researchers having prior experience in the relevant sectors. This innovative initiative showed infrequent accessibility of adequate food as demanded over the year. Considering to the contribution of tribal women’s views on livelihood security and nutrition security, it would give values to redesign the policies and programme implementations effectively through decentralised community participation.

Key Words: Nutritional security, livelihood security, vulnerable tribal women, environmental hygiene, breast feeding practice, decentralised participation.

INTRODUCTION

Nutrition is a productive force to become healthy and wealthy. Nutrients are essential elements for well being of every human. Adequate nutrient materials are indispensable for better health across various stages of life. During the periods of infancy, childhood and adolescence nutritious food is highly required for satisfactory growth and development. Pregnant women and children are more vulnerable in our society in terms of accessing nutritious food even though enough availability. In other way large section of women and children still deprived from nutritious food intake due to extreme cultural obligation. The socio economic practices of the women and children belonging to the tribal communities in Odisha have been demarcated as most significant vulnerable sections. Definitely bearing a child would adversely impact upon the body of mother, so that opportunity for maintaining healthy life style during and after pregnancy is highly required for a woman. Guiding principle of food intake during pregnancy stage is one of the major safeguard for ensuring good heath during pregnancy stage. The dietary intake of food is reflected on maternal weight gain during pregnancy and birth weight of child. However, needs to pay special attention to intake adequate quantitative food along with measuring nutrient value of food availability within the premises. It is commonly understood that low birth weight is one of the indicator of immaturity and referring that the child is not fully developed as required. Infant death was almost common in tribal areas of Odisha and also affected various nutritional diseases such as anaemia, protein energy malnutrition, rickets etc. Obviously, it is true that pregnant women require additional food to increase the body weight and meet nutritional deficiency. Considering to the socio-economic conditions of the tribal community, the balance diet is just like as luxurious as well as ideal choice. It is hardly matter to choose variety of food items. In this connection, low cost food item depending on the availability of foods in the periphery of the local area would be another method to explore.

UNDERSTANDINGS ON NUTRITION AND HEALTH

As stated by World Health Organisation; “health is a complete physical, mental and social wellbeing and not merely the absence of disease or infirmity” (WHO, 1948). Health has direct proportional relationship with food supplement and calorific nutrient value. Adequate food for body helps to increase or decrease nutrition substances of the individual. The calorific value of each food item matters towards emitting energy efficiency. Starting from the mother’s womb a child extensively requires micro nutrients for growth and development. In order to operate body functioning in proper order everybody requires certain nutritional contents for day-to-day function life style. It can be inferred that balance food items with more qualitative would have better implication to become healthy. In fact; most of the developing and underdeveloped countries has been identified where the people consume adequately more quantity of foods having rich in carbohydrates. Of course it produces energy, but not the sufficient condition for cognitive development. However; in the larger perspectives across the globe, multiple actions need to be taken care of to address challenges relating to malnutrition and under-nutrition. It is very common phenomena that a pregnant woman would definitely
require more quantity of food items which can be equal with any stage of life cycle till end. Particularly to the working women and tribal women have been severely affected in deficiency of nutrient contain. If we would look at the availability for food items in their surrounding, it can be locate that the nature based foods are plenty of availability. But the problem lies with consumption pattern, practice, process and promotion. One of the most striking features of the child mortality in rural India is discrimination between male and female. Definitely, the male child seeks more attention and potential source of receiving economic support and gets major share of nutrient value content.

**HEALTH AND NUTRITION SCENARIO IN INDIA**

India is in transition phase to claim as developed country. In this critical juncture, nutritional health is one of the important aspects to work on. People of India still have been suffering basic and communicable disease; these are like under nutrition, malnutrition, obesity, diabetes and hypertension mostly. According to the study report of National Family Health Survey (NFHS) and UNICEF that close to 46% of preschool children have been suffering nutrition deficiency where as 30 % of general men and women suffer various diseases due to lack of protein and nutrient contain. The figure was estimated as per anthropometric indicators. Among the women of India, around 50% pregnant women and children suffer from iron deficiency anaemia, which is a serious concern for everybody till today. In this context it cannot be stated that the problem occurs due to unavailability of foods, rather in accessibility as well as unaffordable conditions pulling down to become a healthy person. Adequate nutrient value in the body can be considered through weight which is varying in gender and perspectives also. The average height and weight has been declining among the women and children as per the estimation of Indian Council of Medical Science Research. However, these indicators are very important to measure nutrient value of the individuals. Based on that respective community situation can also be reflected regarding food intake capacity. In India, the food scarcity is not there but the equitable distribution among the needy is a major challenge till today. Here, we can cite that close to ten tribal district of Odisha is fully know for tribal pockets. If we count food availability over the year, it is obviously come into picture that inaccessibility and unaffordability are the major obstacle rather than number of quantity available per individual. Meanwhile, the government of India has been providing supplementary nutrition to the concern person through Integrated Child Development Service (ICDS) scheme, where both pregnant women and child could get nutrient foods depending upon the availability in the local area.

There are few major programme specifically meant for increasing nutritional health of women and children. Considering to this aspect, ICDS, Mid Day Meal (MDM) and MAMATA scheme can be discussed. The conditional cash assistance to the pregnant and lactating women is clearly defined the objectives of the disbursement. After delivery a women would definitely take adequate rest to look after new born baby, during this the low economic profile women lose job for their livelihood which ultimately impact for the children. To avoid such circumstance, the government of India has been taking initiatives to provide cash assistance to them, through which they can purchase nutrient foods from the open market and feed to the children. As per the recent past report of ministry of health the budgetary provision in few selected areas specific to pregnant & lactating women and children has been declining gradually. Looking in tribal perspectives, health needs to be special attention considering to their habitat, difficult terrains and ecological variability. In addition to this, low paying capacity creates obstacle to afford on time health services. Inaccessibility of medical services, poor infrastructure availability, less number of qualified medical personnel and non availability of private doctors in the remote and inaccessible tribal areas are the most important reasons of nutritional deficiency of pregnant and lactating women in the tribal areas. However, unaware about the health services is also another disadvantage for them, it could have been changed unless serious attention by the local administration and presence of medical as well as paramedical representatives. These are the problems frequently observed and extremely prevalent in low economic states like; Bihar, Odisha, Chhatisgarh, Jharkhand, Madhypradesh and North east states as well.
According to Indian Monetary Fund (IMF) India is the fastest growing economy in the world with 7.3 per cent of Gross Domestic Product (GDP) and it is expected to grow up to 7.5 till next fiscal year. Hence, with this growing economy, it is obvious to expect a developed and expanded low cost health care system for the common citizen of India, but before that we must assess our progress and lacunas on the basis of different major health indicators like malnutrition, Infant Mortality Rate (IMR), Maternal Mortality Rate (MMR), Under 5 Mortality Rate (U5MR), etc. On the basis of goal and outcome of different developmental program we can assess our progress in the above spheres. In this regard the vital data from some of the relevant sources like the achievements of millennium development goal (MDG), State wise survey data of National Family Health Survey (NFHS-4), census of India, 2011 can be taken into consideration. Undoubtedly, health is an influential and crucial sector related closely with the all round development of our country let’s site the health scenario of India in the following ways.

The diet provides slightly higher amounts protein, calories, minerals and vitamins than required for a normal woman. It can be given to the pregnant women in the second and third termister pregnancy when there is extra demand for these nutrients because of the developing fetus. Locally available foods and cereals can be made as regular diet for the pregnant and lactating mothers for adequate nutrient value in the body. The common food for them can be suggested as cereals, pulses, green leafy vegetables, roots, milk and ragi. In case of nursing women, slightly more diet is required than normal women. As estimated by Indian Council of Medical Research 2450 calories followed by 75 gram protein and 50 gram fat is suitable for nursing women which is quite high than average requirement. Non vegetarians can be substituted by consuming additional pulses with 2 eggs or 50 gram meat or fish. However, all the available foodstuffs can be consumed by women without any taboos on any foodstuffs.

**EXPENDITURE OUTLINE**

The total health expenditure of India is 4.1 per cent of its GDP according to govt. of India and it is 1.1 per cent in comparison to our neighbouring countries like Bhutan, Nepal, Srilanka who spends 2.7, 2.6, and 1.4 of their GDP on health. The financial allocation for health in India is much less in comparison to its neighbouring countries also not able to meet the requirement completely. Insufficient financial assistance, Inadequate skilled health care professionals, technical resources, political influence are the major drawback of our system; but the remarkable positive achievements of NHM (National Health Mission) raise a hope for a better health care system in near future.

**Health Indicters of India**

Nearly 5 women die every hour in India from complications develop during child birth. It is happening continuously due to heavy blood loss caused by hemorrhage during first 20 hours of childbirth according to World Health Organization (WHO) Report 2015. Based on Global Health report it is pointed out that nearly 45 thousand mothers die due to causes related to childbirth every year in India which recorded for 17 %of such death globally. Based on the World Health Statistics 2016 the maternal mortality rate of India is 174-100000 live births.

Considering the above facts WHO report showing MMR of 174-100000 live birth, which slightly differs from India’s own estimation of 167-100000 due to the fact that the WHS, whenever possible has computed the rates using standardize categories and methods in order to enhance cross national compatibility.

**Programme Initiation**

---

4 February, 2016, Yojana, Reddy K Srikant
5 February, 2016, Yojana, Reddy K Srikant

Dr. Sucheta Priyabadini, Mr. Santosh Kumar Pradhan, Mrs. Shradha Padhi
Also to speed up immunization process the initiative of central govt. got a vital success with 13.1 lakh children being immunized under mission “Indradhanus”. Central govt. also has declared to increase maternal leave to 28 weeks, adolescent girls are focused under Rastriya Kishor Swasthya Karyakram (RKS Kr), also to increase literacy among girls the major central initiative in the name of “Beti Bachao Beti Padhao (BBBP)” is a remarkable one, it aims to education girls and curve down feticides also to secure their future “Sukanya Samridhi Yojna” is a vital one.

To curve down malnutrition the above indicators will contribute much, still challenges are there, as the rate of malaria could not be able to decrease and we know very well that malaria is also a vital cause behind malnutrition. So, all over the country mixed results are found to be seen in the sphere of maternal and child health care. Various new initiatives and schemes has been commenced by union govt. to empower girls by enhancing their knowledge and awareness on maternal child health, also to reduce IMR and MMR these schemes will play a pivotal role.

Study Process

The study was conducted in 2016 where 300 community people were participated. All the participants were women for giving primary information. Multi sector caste groups respondents were interviewed by the researchers. The study was focused on tribal women community to address the significant relationship of livelihood in respect to promotion of nutritional security. While collecting primary data from ground zero, the researchers used few techniques such as; observations, case study and Focus Group Discussion (FGDs) to get subsequent information relating to livelihoods sustainability and nutrition deficiency of tribal women. In addition to this, key informant interviews were also given equal weight age. The selection of respondents were selected by using sample random sampling techniques where as the FGD participants were selected depending on the availability of the tribal women those were either pregnant or lactating condition. In spite of that, livelihood aspects were covered through qualitative measures. Case studies opinion, Key Informant Interviews (KII) and Focus Group Discussion (FGD) facts considered for establishing nutrition security of tribal women in low socio-economic profile background.

METHODS FOLLOWED DURING SITUATIONAL ANALYSIS

Broadly; the researcher has followed various methods depending on suitability and requirement. In this regards, participants and non-participants methods had been focused extensively with the objectives of drawing practice level information at the ground on level over the period. The methods which were used during the study period have been analyzed in the following manner.

A. Participant

I. Interview

Interviews are conducted to assess the behavioral aspect of the mothers regarding maternal and child health care, their ongoing practices and perception on various ICDS services and to know the knowledge technical skills of front line worker like maintaining different records, growth monitoring and plotting on chart, counseling, home visit schedule, community response towards their work etc and to get some information about the functioning of Primary Health Center (PHC), Nutrition Rehabilitation Center (NRC), Community Health Center(CHC) and to know the role of govt. employees towards maternal child health.

II. Focus Group Discussion (FGD)

Focus Group Discussions (FGD) were conducted to assess the knowledge of pregnant women and lactating on maternal and child health also to know their views on exiting problems, gaps and lacunas in individual and community level.
III. **Village Resource Mapping (VRM)**

Village mapping was done including the key resource persons of the village with the aim to acknowledge them on health scenario of their village by identifying the houses having health issues, having pregnant women and lactating mother, low birth weight baby etc.

IV. **Telephonic Conversation (TC)**

ANFs consult with each other to know the status of maternal child health of their area. The interaction also helped to know the challenges and limitation of SA and to find out the possible solutions. By knowing some special initiatives of govt. in different areas, different response of people as some areas are mostly dominated by the tribal people and some are not, also to discover various blind believes, cultural practices, traditional food prohibition during pregnancy etc. The interaction broadened the understanding on maternal and child health and helped to analyze different qualitative aspects also.

V. **Participation in Administration and Programme Activity of Implementing Partner**

In monthly meetings of Adhar the challenges and limitations of SA were discussed with the staffs of other projects those are running related to child and women areas. During this period the researcher tried to draw possible solutions from the colleagues for effective planning and implementation of the work. It floated new ideas to conduct the study.

B. Non participant

I. **Develop interview schedule**

Interview schedule is a vital tool developed to get exact per cent of various health indicators. It could provide a micro level, clear understanding on maternal and child health at individual, community and system level

II. **Observation**

Observation is also used to gain a reality overview of socio-economic and behavioral aspect of the respondents.

III. **Data analysis**

Data analysis was conducted to get a clear understanding on ground reality it also helped in planning appropriate strategies of intervention.

*Analysis of information*

The information collected through the workshops and the review of secondary data was analyzed by the research team. Standard analytical process for analyzing qualitative and quantitative data / information was developed. In developing the data analysis for qualitative raw data, standard spreadsheet analysis and Microsoft word were used. The analysis of descriptive statistical figures was also developed with spreadsheets. To develop qualitative analysis and synergies, several standard applied sociological methods were used. Standard code based methods, use of Microsoft word and compilation of field regular notes were generated to develop comparative analysis and primary accounts. In order to reach adequate understanding of the local patterns of practices a strong concentration on the visual applications were used. A collection and preservation procedure of regular field photographs with thematic connotations has been adopted. This allowed presenting the findings in a more visual manner of the local contexts and meanings.

**ODISHA HEALTH STATUS**

The health scenario of Odisha is not much satisfactory as it is lagging much behind to achieve the targets of MDG. Odisha is in 3rd position in U5MR with 66 where as it is estimated 49 for India. It is also in 3rd position in IMR with 51 after MP and Asam with 54. Official sources maintained that Odisha tops the list in both Early Neonatal Mortality Rate (ENMR) and IMR in the country. While ENMR in Odisha remains 28, in kerla it is
only 4. The national average for ENMR is 22. Surprisingly, the ENMR in several other states including Bihar, Haryana, Himachal Pradesh, Rajasthan, Karnataka, Tamilnadu, Punjab, Maharashtra and Gujarat are less than Odisha. The same sources recorded that MMR also high in Odisha despite implementation of several schemes by state government. While the national average of MMR is 167, in Odisha it is 222, one of the highest in the country. The above figure reveals that Odisha has not achieved much success in reducing the vital menace of IMR, MMR and U5MR and the state is likely to miss its MDG target with a huge margin in comparison to other states and the nation itself.

In spite of the above health scenario several programs and new initiatives has also been taken by both central and state govt. to increase the health status of mothers and children under ICDS like Janani Sisu Surakhya Karyakram (JSSK), Janani Surakhya Yajana (JSY), National Sisu Surakhya Karyakram (NSSK), RKSK etc. The worst status of IMR and MMR in many states including Odisha has also drawn attention of union govt. to include some Major initiatives while re-scripting Draft National Health Policy which is to be come in 3-4 months according to Ministry Of Family and Child Development (MWCD), so we can hope for an inclusive, democratic, expanded and low cost health care system in near future.

Balangir Health Situations

With 16, 48,997 Balangir is on 10th position out of all the districts of Odisha according to census 2011 and total literacy rate of Balangir is 64.72 where as female literacy is 53.50 and 75.85 per cent is male literacy rate. Literacy is closely associated with awareness and sensitivity of a society towards all kinds of socio-economic development. Female literacy especially has great impact on the overall development of a family. Here with the above statistics it can be stated that female literacy rate is quite unsatisfactory and working female are 30.61 out of total 43.70. So it might be difficult for the working and poor literate mother to take care of the health of their children properly and poor awareness used to be seen among these mothers about reproductive health and new born care.

Balangir consist of total 1,751 inhabited villages. There 1 district Hospital and 2 sub divisional hospital 15 CHC and only 42 Primary Health Center (PHC) at sector level for the whole district recorded by AHS, 2012. The availability of health centers is only 3-4 per cent for total number of villages which is such inadequate to meet the health requirement of the peoples. At the same time accessibility of health facility becomes a vital issue for the villages situate in the remote as the transportation system is not so well developed to most of the villages like Kadalipali, Valupali, Sanjhankarpali, etc. The health status of the district can be evaluated on the basis of various state and national level survey reports, let’s site some of those in the following ways.

District Level Household Survey (DLHS-3) tells us that 30-49% children are not breastfeed within one hour of birth in Balangir district and IMR is below 66%, only 50-89% children are fully immunized and with 4.4% Balangir has the minimum number of children exclusively breastfeed, while state average of initiation of breast feeding within one hour is only 54.3% and only 50.2% children are exclusively breastfeed. DLHS also recorded only 44.3% of mothers are doing institutional delivery and only 49% mothers are getting post natal care and only 14.8% are receiving full antenatal care. There are only 72% optional hospitals for delivery, which cause the miserable condition of the people from interior area and having poor background. Different reports also show a low degree of awareness among the people about birth control and use of contraceptive, which is a major cause of many reproductive diseases and at time affect the health of both the mother and child, Annual Household Survey (AHS) report says that with 13.1% Balangir stands on the highest rank in periodic abstinence and male sterilization is also lowest in this area. Low birth weight babies i.e. those who has less than 2.5kg weight are 16.0% in Balangir district, which is lower than all other districts of Odisha. At the same time Balangir have the highest number of birth registration i.e. 95.8 per cent.

---

7 Millennium Development Goal Indian country report, 2015
8 Census India, 2011
9 Odisha economic Survey 2013-14, Planning and Coordination Department, Govt. of Odisha
**Maternal and Child Health**

The above data reveals that Balangir district of Odisha is a backward state from multiple directions especially the status of maternal and child health is in poor condition here. Considering the situation; with the initiatives of union government it has been included under special assistance developmental program named as KBK Development Agency. Various health programs under ICDS and NHM are also being implemented to enhance the overall health status of the district. But daily media coverage highlights the issues of poor accessibility of facilities by the people due to distance from health care center, poor transport facility, lack of awareness and proper information creates hindrance on the way to access the same. Apart from that health care at a low cost is a major area of concern. Though govt. of India is providing many health care services at a low cost still people depends more on private health care center which causes a heavy economic burden on them. It is because of long weighting hours, insufficient bad, dissatisfaction in service, and sometimes people have to spend their own money to get the medicine, and vehicular support in spite of government declaration for free service to the patient.

**Glimpses of Facts at Ground level**

- Only 20% children come to AWC regularly
- 55% children took SNP regularly
- Immunization coverage is found 98.3%
- Only 20% mothers remain present at the time of counseling on VHND day
- 32% mothers provided colostrums in time to the child
- 47% women have registration during 1st trimester
- 33.3% have no idea about compulsory 4 ANC check up
- 53.33% mother were not taking any special diet during pregnancy
- 80% mother found were taking rest for 2-3 hours in day time during pregnancy
- 20% mothers were taking THR themselves in their daily diet
- 25% mother had started complementary feeding before 6 months
- Out of 12 AWC only 7 had its own building
- 9 AWC had no bad for the checkup of pregnant women on VHND and in 2 village VHND are not conducted regularly
- 4 AWCs had no weighing machine in their center and in 6 AWC the growth chart was completely blank
- No AWC food demonstration had been conducted from last 6 months
- No village MC member or PRI members were participating on VHND
- In 4 villages community people complained about irregular opening of AWC and SNP distribution
- No AWC provided utensils to the child completed 6 months
- 1 AWW not filled growth records and was not taking MUAC due to poor knowledge to conduct the same

Census India 2011, Provisional Population Totals, Paper-1 of 2011, Odisha Series 22

10 Yojana, Jan, 2016

Dr. Sucheta Priyabedini, Mr. Santosh Kumar Pradhan, Mrs. Shradha Padhi
CONCLUSION

The issues of malnutrition can be better addressed with increasing the employment opportunities at local level. If the income increases, the people can have better option for food and other life style. In the meanwhile, the growing menace of alcohol should be addressed properly towards a smooth family. it also damages the economy of the family badly. AT best it can be stated that people are doing best for their survival but to activate the development process an active regular participation required among them. Policy implementation mechanism should be more strategic so that it could reach to the beneficiary in person and community as a whole. In regard to this activation of regular participation in different community meetings, raising voice and demanding services at anganwadi center, attending regular VHND meetings by the mother, participating in MGNREGA and regular talks with the concerned stake holders could establish a connection among all. It requires proper awareness among the villagers itself.

Reference
1. Millenium Development Goal Indian country report, 2015
2. Yojana, February, 2016
3. Odisha economic Survey 2013-14, Planning and Coordination Department, Govt. of Odisha
5. Census India 2012-13 fact sheet, Annual Health Survey Bulletin
6. 10 facts on nutrition. World Health Oragnization (WHO).
7. WHO, nutritional fact sheet
http://nrhm.gov.in/nrhm-in-state/state-wise